



UNITED STATES PATENT AND TRADEMARK OFFICE

Facsimile Transmission

To:	Name:	Mr. Stephen Y. Pang (reg. 38575)
	Company:	
	Fax Number:	4155760300
	Voice Phone:	6503262400
From:	Name:	Michael Pham
	Voice Phone:	5712723924

37 C.F.R. 1.6 sets forth the types of correspondence that can be communicated to the Patent and Trademark Office via facsimile transmissions. Applicants are advised to use the certificate of facsimile transmission procedures when submitting a reply to a non-final or final Office action by facsimile (37 CFR 1.8(a)).

Fax Notes:

Attached are proposed claim amendments to improve clarity of the claims and to try to put the case into condition for allowance. Please let me know by close of business thursday, October 15, 2009 whether an examiner's amendment may be done.

Date and time of transmission: Tuesday, October 20, 2009 8:09:24 PM
Number of pages including this cover sheet: 17

Proposed Draft Amendments:

21. (currently amended) A method for facilitating the reuse of computer graphics models in a computer system comprising a processor and a memory, the method comprising:

receiving, from a first user in a plurality of users, one or more commands for creating a first computer graphics model in a model creation environment in the processor, wherein the first computer graphics model includes a first plurality of geometric objects containing one or more attributes that are overridable and not overridable, wherein an overridable attribute is a public attribute modifiable by any user and an attribute that is not overridable is a private attribute only modifiable by a user who is the model creator of the first computer graphics model, and wherein the first plurality of geometric objects in the first computer graphics model are organized according to a hierarchical structure;

receiving, from the first user, a request to open and create an instance of a second computer graphics model within the first computer graphics model in the processor, wherein the second computer graphics model includes a second plurality of geometric objects containing one or more attributes that are overridable and not overridable, wherein an overridable attribute is a public attribute modifiable by any user and an attribute that is not overridable is a private attribute only modifiable by a user who is the model creator of the second computer graphics model and wherein the second computer graphics model is independent of the first computer graphics model;

in response to the request, retrieving a specification of the second computer graphics model from the memory, wherein the specification of the second computer graphics model includes information identifying, for at least one object in the second plurality of geometric objects, one or more attributes of said at least one object of the second plurality of geometric objects that are overridable;

creating the instance of the second computer graphics model within the first computer graphics model in the processor, wherein creating the instance of the second computer graphics model within the first computer graphics model in the processor further comprises geometrically coupling the instance of the second computer graphics model to the hierarchical structure of the first computer graphics model;
and

for each object of the second plurality of geometric objects in the instance of the second computer graphics model:

determining, based on the specification of the second computer graphics model, attributes of specific geometric objects from the second plurality of geometric objects that are overridable in the processor^{[[:]}, and

enabling the first user to specify an override value for an attribute of a specific geometric object of the second plurality of geometric objects that is determined to be overridable in the processor; and

storing a reference to the second computer graphics model in a specification of the first computer graphics model in the model creation environment such that a copy of the second computer graphics model is not stored in the first computer graphics model, and wherein ^{[[the second computer graphics model is not stored in the first computer graphics model]]} each time the second computer graphics model is referenced the model creation environment opens and creates the latest copy of the second computer graphics model from the memory.

22. (cancelled) The method of claim 21, wherein the first plurality of geometric objects in the first computer graphics model are organized according to a hierarchical structure, and wherein including the instance of the second computer graphics model in the first computer graphics model comprises geometrically coupling the instance of the second computer graphics model to the hierarchical structure.

23. (currently amended) The method of claim 21 further comprising:

receiving, from the first user, the override value for an overridable attribute of an object in the instance of the second computer graphics model in the processor;

applying the override value as a current value for the overridable attribute in the context of the first computer graphics model in the processor; and

storing the specification of the first computer graphics model wherein the specification includes the reference to the specification of the second computer graphics model and the override value in the memory.

24. (previously presented) The method of claim 23, wherein the specification of the first computer graphics model is stored as a first file, and wherein the specification of the second computer graphics model is stored as a second file distinct from the first file.

25. (currently amended) The method of claim 23 further comprising:

receiving, from a second user in the plurality of users, one or more commands for creating a third computer graphics model in the model creation environment in the processor, the third computer graphics model including a third plurality of objects containing one or more attributes that are overridable and not overridable, wherein an overridable attribute is a public attribute modifiable by any user and an attribute that is not overridable is a private attribute only modifiable by a user who is the model creator of the third computer graphics model;

receiving, from the second user, a request to include an instance of the first computer graphics model in the third computer graphics model in the processor, ;

wherein said including the instance of the first computer graphics model in the third computer graphics model comprises geometrically coupling the instance of the first computer graphics model to a hierarchical structure of the third computer graphics model; and

in response to the request, retrieving the specification of the first computer graphics model from the memory, the specification of the first computer graphics model including information identifying, for at least one object in the first plurality of geometric objects, one or more attributes of said at least one object of the first plurality of geometric objects that are overridable;

creating the instance of the first computer graphics model within the third computer graphics model in the processor; and

for each object of the first plurality of geometric objects in the instance of the first computer graphics model:

determining, based on the specification of the first computer graphics model, attributes of said each object of the first plurality of geometric objects that are overridable in the processor[[.]]; and

enabling the second user to override values for the attributes of said each object of the first plurality of geometric objects that are determined to be overridable in the processor; and
storing a reference to the first computer graphics model in a specification of the third computer graphics model in the model creation environment such that a copy of the first computer graphics model is not stored in the third computer graphics model, and [[.]] wherein [[the first computer graphics model is not stored in the third computer graphics model]]each time the first computer graphics model is referenced the model creation environment opens and creates the latest copy of the first computer graphics model from the memory.

26. (previously presented) The method of claim 21, wherein the second computer graphics model is created by a second user in the plurality of users distinct from the first user.

27. (currently amended) The method of claim 26 further comprising:

receiving, from the first user, a request to include an instance of a third computer graphics model in the first computer graphics model in the processor, the third computer graphics model having been created by a third user in the plurality of users distinct from the first and second users, the third computer graphics model including a third plurality of objects containing one or more attributes that are overridable and not overridable, wherein an overridable attribute is a public attribute modifiable by any user and an attribute that is not overridable is a private attribute only modifiable by a user who is the model creator of the third computer graphics model, and

wherein said including the instance of the third computer graphics model in the first computer graphics model comprises geometrically coupling the instance of the third computer graphics model to the hierarchical structure of the first computer graphics model;

in response to the request, retrieving a specification of the third computer graphics model from the memory, the specification of the third computer graphics model including information identifying, for at least one object in the third plurality of objects, one or more attributes of said at least one object of the third plurality of objects that are overridable;

creating the instance of the third computer graphics model within the first computer graphics model in the processor; and

for each object of the third plurality of geometric objects in the instance of the third computer graphics model:

determining, based on the specification of the third computer graphics model, attributes of said each object of the third plurality of geometric objects that are overridable in the processor[[:]], and

enabling the first user to override values for the attributes of said each object of the third plurality of geometric objects that are determined to be overridable in the processor; and

storing a reference to the third computer graphics model in the specification of the first computer graphics model in the model creation environment such that a copy of the third computer graphics model is not stored in the first computer graphics model, and [[:]] wherein [[:the third computer graphics model is not stored in the first computer graphics model]]each time the third computer graphics model is referenced the model creation environment opens and creates the latest copy of the third computer graphics model from the memory.

28. (currently amended) The method of claim 21, wherein the specification of the second computer graphics model further includes information identifying, for at least one object in the second plurality of geometric objects, one or more attributes of said at least one object of the second plurality of geometric objects that are not overridable, and wherein the method further comprises:

for each object of the second plurality of geometric objects in the instance of the second computer graphics model:

determining, based on the specification of the second computer graphics model, attributes of said each object of the second plurality of geometric objects that are not overridable in the processor[[:]], and

preventing the first user from overriding values for the attributes of said each object of the second plurality of geometric objects that are determined to be not overridable in the processor.

29. (currently amended) A system for facilitating the reuse of computer graphics models, the system comprising:

a [[storage device]] memory configured to store specifications for a plurality of computer graphics models; and

a [[processing component]] processor in communication with the [[storage device]]memory, the [[processing component]] processor being configured to:

receive, from a first user in a plurality of users, one or more commands for creating a first computer graphics model in a model creation environment, wherein the first computer graphics model includes a first plurality of geometric objects containing one or more attributes that are overridable and not overridable, wherein an overridable attribute is a public attribute modifiable by any user and an attribute that is not overridable is a private attribute only modifiable by the user who is the model creator of the first computer graphics model, and wherein the first plurality of geometric objects in the first computer graphics model are organized according to a hierarchical structure;

receive, from the first user, a request to [[include]]open and create an instance of a second computer graphics model in the first computer graphics model, wherein the second computer graphics model includes a second plurality of geometric objects containing one or more attributes that are overridable and not overridable, wherein an overridable attribute is a public attribute modifiable by any user and an attribute that is not overridable is a private attribute only modifiable by the user who is the

model creator of the second computer graphics model, and wherein the second computer graphics model is independent of the first computer graphics model;

in response to the request, retrieve a specification of the second computer graphics model from the [[storage device]]memory, the specification of the second computer graphics model including information identifying, for at least one object in the second plurality of geometric objects, one or more attributes of said at least one object in the second plurality of geometric objects that are overridable;

create the instance of the second computer graphics model and include said instance of the second computer graphics model in the first computer graphics model, wherein including the instance of the second computer graphics model in the first computer graphics model comprises geometrically coupling the instance of the second computer graphics model to the hierarchical structure of the first computer graphics model; and

for each object of the second plurality of geometric objects in the instance of the second computer graphics model:

determine, based on the specification of the second computer graphics model, attributes of said each object of the second plurality of geometric objects that are overridable~~[[;]]~~, and

enable the first user to override values for the attributes of said each object of the second plurality of geometric objects that are determined to be overridable;and

wherein a reference to the second computer graphics model from the memory~~[[storage device in]]~~ is stored in a specification of the first computer graphics model ~~[[, and wherein]]~~ such that a copy of the second computer graphics model is not stored in the first computer graphics model, and wherein each time the second computer graphics model is referenced, the model creation environment opens and creates the latest copy of the second computer graphics model from memory.

30. (cancelled) The system of claim 29, wherein the first plurality of geometric objects in the first computer graphics model are organized according to a hierarchical structure, and wherein including the instance of

Art Unit: 2167

the second computer graphics model in the first computer graphics model comprises geometrically coupling the instance of the second computer graphics model to the hierarchical structure.

31. (currently amended) The system of claim 29, wherein the the processor[[processing component]] is further configured to:

receive, from the first user, a new value for an overridable attribute of an object in the instance of the second computer graphics model;

apply the new value as a current value for the overridable attribute in the context of the first computer graphics model; and

store [[a]]the specification of the first computer graphics model in the [[storage device]]memory, wherein the specification includes a reference to the specification of the second computer graphics model and the new value.

32. (currently amended) The system of claim 31, wherein the specification of the first computer graphics model is stored as a first file in the [[storage device]]memory, and wherein the specification of the second computer graphics model is stored as a second file in the [[storage device]]memory distinct from the first file.

33. (currently amended) The system of claim 31, wherein the processing component is further configured to:

receive, from a second user in the plurality of users, one or more commands for creating a third computer graphics model in the model creation environment, the third computer graphics model including a third plurality of objects containing one or more attributes that are overridable and not overridable, wherein an overridable attribute is a public attribute modifiable by any user and an attribute that is not overridable is a private attribute only modifiable by a user who is the model creator of the third computer graphics model;

Art Unit: 2167

receive, from the second user, a request to include an instance of the first computer graphics model in the third computer graphics model, wherein including the instance of the first computer graphics model in the third computer graphics model comprises geometrically coupling the instance of the first computer graphics model to a hierarchical structure of the third computer graphics model;

in response to the request, retrieve the specification of first computer graphics model from the [[storage device]]memory, the specification of the first computer graphics model including information identifying, for at least one object in the first plurality of geometric objects, one or more attributes of said at least one object of the first plurality of geometric objects that are overridable;

create the instance of the first computer graphics model and include said instance in the third computer graphics model; and

for each object of the first plurality of geometric objects in the instance of the first computer graphics model:

determine, based on the specification of the first computer graphics model, attributes of said each object of the first plurality of geometric objects that are overridable_{[[;]]}, and

enable the second user to override values for the attributes of said each object of the first plurality of geometric objects that are determined to be overridable; and

store a reference to the first computer graphics model in a specification of the third computer graphics model in the model creation environment such that a copy of the first computer graphics model is not stored in the third computer graphics model, and wherein each time the first computer graphics model is referenced the model creation environment opens and creates the latest copy of the first computer graphics model from the memory.

34. (previously presented) The system of claim 29, wherein the second computer graphics model is created by a second user in the plurality of users distinct from the first user.

35. (currently amended) The system of claim 34, wherein the processing component is further configured to:

receive, from the first user, a request to include an instance of a third computer graphics model in the first computer graphics model, the third computer graphics model having been created by a third user in the plurality of users distinct from the first and second users, the third computer graphics model including a third plurality of objects containing one or more attributes that are overridable and not overridable, wherein an overridable attribute is a public attribute modifiable by any user and an attribute that is not overridable is a private attribute only modifiable by a user who is the model creator of the third computer graphics model, and wherein including the instance of the third computer graphics model in the first computer graphics model comprises geometrically coupling the instance of the third computer graphics model to the hierarchical structure of the first computer graphics model;

in response to the request, retrieve a specification of the third computer graphics model from the memory[[storage device]], the specification of the third computer graphics model including information identifying, for at least one object in the third plurality of objects, one or more attributes of said at least one object of the third plurality of objects that are overridable;

create the instance of the third computer graphics model and include said instance in the first computer graphics model; and

for each object of the third plurality of geometric objects in the instance of the third computer graphics model:

determine, based on the specification of the third computer graphics model, attributes of said each object of the third plurality of geometric objects that are overridable[[:]], and

enable the first user to override values for the attributes of said each object of the third plurality of geometric objects that are determined to be overridable;

store a reference to the third computer graphics model in the specification of the first computer graphics model in the model creation environment such that a copy of the third computer graphics model is not stored in the first computer graphics model, and wherein each time the third computer graphics model is referenced the model creation environment opens and creates the latest copy of the third computer graphics model from the memory.

36. (currently amended) The system of claim 29, wherein the specification of the second computer graphics model further includes information identifying, for at least one object in the second plurality of geometric objects, one or more attributes of said at least one object in the second plurality of geometric objects that are not overridable, and wherein the processing component is further configured to:

for each object of the second plurality of geometric objects in the instance of the second computer graphics model:

determine, based on the specification of the second computer graphics model, attributes of said each object of the second plurality of geometric objects that are not overridable[[:]], and prevent the first user from overriding values for the attributes of said each object of the second plurality of geometric objects that are determined to be not overridable.

37. (currently amended) [[A tangible machine-readable medium for a computer system, the tangible machine readable medium having stored thereon a series of instructions which, when executed by a processing component, cause the processing component to to:]] A tangible machine-readable medium having stored thereon a series of computer executable instructions for a computer system which when executed by a processor, cause the processor to execute the instructions for the computer system to provide the steps of:

receive, from a first user in a plurality of users, one or more commands for creating a first computer graphics model in a model creation environment, wherein the first computer graphics model includes a first plurality of objects containing one or more attributes that are overridable and not overridable, wherein an overridable attribute is a public attribute modifiable by any user and an attribute that is not overridable is a private attribute only modifiable by a user who is the model creator of the first computer graphics model, and wherein the first plurality of geometric objects in the first computer graphics model are organized according to a hierarchical structure;

receive, from the first user, a request to include an instance of a second computer graphics model in the first computer graphics model, wherein the second computer graphics model includes a second

plurality of objects containing one or more attributes that are overridable and not overridable, wherein an overridable attribute is a public attribute modifiable by any user and an attribute that is not overridable is a private attribute only modifiable by a user who is the model creator of the second computer graphics model, and wherein the second computer graphics model is independent of the first computer graphics model;

in response to the request, retrieve a specification of the second computer graphics model, the specification of the second computer graphics model including information identifying, for at least one object in the second plurality of geometric objects, one or more attributes of said at least one object of the second plurality of geometric objects that are overridable;

create the instance of the second computer graphics model and including said instance of the second computer graphics model in the first computer graphics model, wherein said including said instance of the second computer graphics model in the first computer graphics model comprises geometrically coupling the instance of the second computer graphics model to the hierarchical structure of the first computer graphics model; and

for each object in the second plurality of geometric objects in the instance of the second computer graphics model:

determine, based on the specification of the second computer graphics model, attributes of said each object that are overridable^{[[;]]}, and

enable the first user to override values for the attributes of said each object that are determined to be overridable; and

wherein a reference to the second computer graphics model from memory is stored in a specification of the first computer graphics model such that a copy of the second computer graphics model is not stored in the first computer graphics model, and wherein each time the second computer graphics model is referenced, the model creation environment opens and creates the latest copy of the second computer graphics model from the memory.

38. (cancelled) The tangible machine-readable medium of claim 37, wherein the first plurality of geometric

objects in the first computer graphics model are organized according to a hierarchical structure, and wherein including the instance of the second computer graphics model in the first computer graphics model comprises geometrically coupling the instance of the second computer graphics model to the hierarchical structure.

39. (currently amended) The tangible machine-readable medium of claim 37, wherein the series of instructions further cause the processing component to:

receive, from the first user, a new value for an overridable attribute of an object in the instance of the second computer graphics model;

apply the new value as a current value for the overridable attribute in the context of the first computer graphics model; and

store [[a]]the specification of the first computer graphics model, wherein the specification includes a reference to the specification of the second computer graphics model and the new value.

40. (previously presented) The tangible machine-readable medium of claim 39, wherein the specification of the first computer graphics model is stored as a first file, and wherein the specification of the second computer graphics model is stored as a second file distinct from the first file.

41. (currently amended) The tangible machine-readable medium of claim 39, wherein the set of instructions further cause the processing component to:

receive, from a second user in the plurality of users, one or more commands for creating a third computer graphics model in the model creation environment, the third computer graphics model including a third plurality of objects containing one or more attributes that are overridable and not overridable, wherein an overridable attribute is a public attribute modifiable by any user and an attribute that is not overridable is a private attribute only modifiable by a user who is the model creator of the third computer graphics model;

receive, from the second user, a request to include an instance of the first computer graphics model in the third computer graphics model;

in response to the request, retrieve the specification of the first computer graphics model, the specification of the first computer graphics model including information identifying, for at least one object in the first plurality of geometric objects, one or more attributes of said at least one object that are overridable;

create the instance of the first computer graphics model and include said instance of the first computer graphics model in the third computer graphics model, wherein said include the instance of the first computer graphics model in the third computer graphics model comprises geometrically coupling the instance of the first computer graphics model to a hierarchical structure of the third computer graphics model; and

for each object of the first plurality of geometric objects in the instance of the first computer graphics model:

determine, based on the specification of the first computer graphics model, attributes of said each object of the first plurality of geometric objects that are overridable_{[[;]]}, and

enable the second user to override values for the attributes of said each object of the first plurality of geometric objects that are determined to be overridable; and

store a reference to the first computer graphics model in a specification of the third computer graphics model in the model creation environment such that a copy of the first computer graphics model is not stored in the third computer graphics model, and wherein each time the first computer graphics model is referenced the model creation environment opens and creates the latest copy of the first computer graphics model from the memory.

42. (previously presented) The tangible machine-readable medium of claim 37, wherein the second computer graphics model is created by a second user in the plurality of users distinct from the first user.

43. (currently amended) The tangible machine-readable medium of claim 42, wherein the set of instructions further cause the processing component to:

receive, from the first user, a request to include an instance of a third computer graphics model in the first computer graphics model, the third computer graphics model having been created by a third user in the plurality of users distinct from the first and second users, the third computer graphics model including a third plurality of objects containing one or more attributes that are overridable and not overridable, wherein an overridable attribute is a public attribute modifiable by any user and an attribute that is not overridable is a private attribute only modifiable by the user who is the model creator of the third computer graphics model;

in response to the request, retrieve a specification of the third computer graphics model, the specification of the third computer graphics model including information identifying, for at least one object in the third plurality of objects, one or more attributes of said at least one object that are overridable;

create the instance of the third computer graphics model and include said instance of the third computer graphics model in the first computer graphics model, wherein said include the instance of the third computer graphics model in the first computer graphics model comprises geometrically coupling the instance of the third computer graphics model to the hierarchical structure of the first computer graphics model; and

for each object of the third plurality of geometric objects in the instance of the third computer graphics model:

determine, based on the specification of the third computer graphics model, attributes of said each object of the third plurality of geometric objects that are overridable; and

enable the first user to override values for the attributes of said each object of the third plurality of geometric objects that are determined to be overridable; and

store a reference to the third computer graphics model in the specification of the first computer graphics model in the model creation environment such that a copy of the third computer graphics model is not stored in the first computer graphics model, and wherein each time the third computer graphics

Art Unit: 2167

model is referenced the model creation environment opens and creates the latest copy of the third computer graphics model from the memory.

44. (previously presented) The tangible machine-readable medium of claim 37, wherein the specification of the second computer graphics model further includes information identifying, for at least one object in the second plurality of geometric objects, one or more attributes of said at least one object in the second plurality of geometric objects that are not overridable, and wherein the method further comprises:

for each object in the instance of the second computer graphics model:

determining, based on the specification of the second computer graphics model, attributes of said each object of the second plurality of geometric objects that are not overridable^{[[:]}, and

preventing the first user from overriding values for the attributes of said each object of the second plurality of geometric objects that are determined to be not overridable.